



Erasmus+

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TECHNICAL GUIDE

Using Attachments in Activities

1. Introduction

Attachments are objects that the avatar can equip in a specific parts of his body (e.g. a tool item that the avatar holds or a hat that the avatar wears on his head). You can utilize attachments as parts of a learning scenario.

In WOP we have used an attachment object in one of the scenarios, where the avatar receives and equips an imaginary gun that shoots photons of various frequencies.

Attachments are basically objects (simple prims or linked sets) that are attached in the avatar's body. Since they are attached, they are connected with the avatar and you can take advantage of this.



2. Technical Details

First you need to create the object that you will use as an Attachment. Unless you want something very simple, you will need a linked set of prims. Then use scripts in the prims, and set the communication between its parts, or with other objects

When the user will equip the Attachment object you can have an 'attach' event be triggered and store the avatar's ID. This way the Attachment will be able to use this ID in the future to communicate with the avatar or with other objects in the world through messages in specific channels. For example if a particular action in the 3D World requires that the user has equipped some object, when the user tries to carry out the action, send the user's ID as a message in a channel that the attachment listens on. The attachment of a user that will receive this message can check if the ID refers to it and send a message in another channel to broadcast that indeed the user has the attachment equipped, thus triggering the action to actually take place.

Notice that you can use the 'GetPos' function to get the current position of the Attachment, which means that you can get the location of the avatar as well. You can take advantage of this to trigger some actions/messages when the avatar enters some specific area of the World. Use a 'timer' event to periodically check the position of the avatar and run the required actions.

When you have created the object you can use 'Take Copy' to bring it on your inventory and then right click and use Equip to select the body part you prefer. The object will appear on the selected body part, and you can select it and adjust it by rotating, scaling and moving it as you prefer. When you unequip it, the object will store the adjustments you made and next time it is equipped by you or another avatar, it will appear in the correct, adjusted position as it should!

Finally you need a way to give the Attachment object to the avatars. A simple idea is to create a crate object. The crate will be used to give (IGiveInventory) the attachment object to users that click it (touch_start event).

You can find the scripts we use and more instructions in the "Scripts Section" here: <http://aigroup.ceid.upatras.gr/wop-oer/scripts.html>

3. References/Links

<http://aigroup.ceid.upatras.gr/wop-oer/scripts.html>

http://wiki.secondlife.com/wiki/LSL_Portal

http://wiki.secondlife.com/wiki/Touch_start

<http://wiki.secondlife.com/wiki/LIMessageLinked>

http://wiki.secondlife.com/wiki/Link_message

<http://wiki.secondlife.com/wiki/LIGetPos>

<http://wiki.secondlife.com/wiki/Attach>